WILDLIFE CORRIDOR ASSESSMENT

VENTURA STATE ROUTE 118

FIRST QUARTER REPORT

LSA

May 27, 2003

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VENTURA STATE ROUTE 118

FIRST QUARTER REPORT

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INTRODUCTION

This is the first quarterly report of a one-year study, conducted by LSA Associates, Inc. (LSA), documenting potential wildlife linkages between the Santa Susana Mountains and the Simi Hills by way of 13 existing wildlife crossings along the Ventura State Route 118 (SR-118) Corridor from the City of Moorpark, Ventura County, in the west, to Chatsworth (City of Los Angeles), Los Angeles County, in the east (Appendix A, Figure 1). Listed by location, from west to east, the 13 wildlife crossings include: Collins Drive Box Culvert, Alamos Canyon West Reinforced Concrete (RC) Culverts, Alamos Canyon Underpass, Alamos Canyon East Pipe Culvert, Simi Valley Landfill Pipe Culvert, Sand Canyon Box Culvert, Las Llajas Underpass, White Oak Park, Rocky Peak Overcrossing, Santa Susana Arch, Movie Lane Overcrossing, Canoga Street Underpass, and Browns Canyon Creek. Refer to Appendix A, Figures 1-13, for maps of crossings, camera and scent station locations.

Prior to the survey, a Work Plan – Field Surveys Document (Document) was prepared by LSA for Caltrans (April 29, 2003) to serve as a guideline in conducting the wildlife surveys throughout the year. During the course of conducting this initial survey, minor changes were made to the Document and are reflected in this report. The changes were in respect to the addition of scent stations at specific locations and the elimination of camera stations due to vandalism.

The wildlife surveys were conducted by LSA wildlife biologists. Camera station installation was done by John Ko (LSA), Mike Weller, and Leo Simone. Scent Station site preparation was done by Maria Lum (LSA Project Manager), Laura Belt, and Mike Trueblood. The data collection was done primarily by Laura Belt and Leo Simone with assistance from John Ko, Mike Weller and Maria Lum during the first two days of the survey. The quarterly report was prepared by Laura Belt, Maria Lum, Leo Simone, John Ko and Mike Weller with support from LSA Graphics and GIS Departments. Caltrans Environmental Planner, Amy Pettler, also assisted with scent station installation during the first survey day.

STUDY AREA

The wildlife movement study area includes 13 potential wildlife crossings (Crossings) between Collins Drive in the City of Moorpark on the west and Canoga Avenue in Chatsworth (City of Los Angeles) on the east. The Crossings are either RC box culverts, RC pipe culverts, RC arch, corrugated metal pipes, or bridge structures. The bridge structures are called Overpasses when the Crossing spans over SR-118 and are called Underpasses at locations where SR-118 crosses over a secondary road, wash or creek. The study also includes the surrounding areas on each side of the Crossings. In general, all of the Crossings could potentially accommodate the passage of medium-sized to small mammals such as coyotes, bobcats, and rodents. Some existing Crossings with a culvert opening greater than 25 square feet, could potentially allow for the passage of large to medium-sized wildlife species such as bears, mountain lions, and mule deer. All of the Crossings provide potential linkages between the Santa Susana Mountains in the north and the Simi Hills in the south.

The types of existing Crossings within the study area are diverse and include various forms of reinforced concrete box culverts, corrugated metal pipes, bridge overpasses, and street underpasses. Each type of Crossing located within the study area is listed in Appendix B, Table A along with its structure dimensions.

The associated plant communities within the study area include a diverse mix of coastal sage scrub, oak woodlands, mule fat scrub, southern willow scrub, southern cottonwood-willow riparian, non-native grasslands, and disturbed. Specific habitats types associated with each Crossing are listed in Appendix B, Table B.

METHODS

In the vicinity of each Crossing, the presence and diversity of wildlife were documented using scent stations, general scat and track surveys, and direct observations. In addition, photo stations were set up at the Crossings to determine direct wildlife use of the Crossings. The first survey was conducted May 5 through May 10, 2003. Future quarterly wildlife surveys will be conducted in the summer, fall, and winter of 2003.

Scent Stations

The purpose of the scent stations is to help determine the species of wildlife in the vicinity of the Crossings and the frequency of their presence. These data will help to give an overall sense of the wildlife population that can then be compared with actual wildlife usage of the Crossings. Various numbers of scent stations were placed within 100 feet of the 13 Crossings, for a total of 29 scent stations, as listed in Appendix B, Table C. The general location of each scent station, and photo station is shown in Appendix A, Figure 2. Detailed depictions of each scent site and photo station location are depicted in Appendix A, Figures 3 through 13. Since most of the species of the survey focus are carnivores – with the exception of mule deer – efforts to attract carnivores were made through bait selection. The scent station locations were selected based on the topography, accessibility, presence of game trails, and wildlife sign. Photographs are provided in Appendix C, Figure C1 to illustrate the typical scent station installation.

A three-foot metal curb stake was placed in the center of each scent station. The vegetation within a three-foot radius of the stake was cleared (as necessary) so that it would not interfere with making a clear track impression within the tracking medium. Diatomaceous earth (DE) was spread out within the three-foot radius and smoothed to an even finish with a concrete trowel to provide a medium that would aid in the identification of tracks.

The bait was placed in a 12-inch by 12-inch bag constructed of a fine-meshed metal screen. The bait was replaced on an as needed basis, as it dried or lost its scent. The bait bag was fastened to the stake using bailing wire. The bait consisted of canned seafood-flavored cat food, beef liver, and cut fish.

Each scent station was checked every morning during the survey period, and all clearly identifiable tracks at each station were recorded to genus and species, where possible. Once all tracks were recorded, the DE was smoothed and additional DE was added when necessary. Fresh bait was added to the bait bags as necessary to maintain a strong scent.

Automated Photo Stations

Automated photo stations (Trail Master Trail Monitors) were set up at each end of the wildlife crossing, as listed in Appendix B, Table C, and depicted in Appendix A, Figure 2. The location of each camera station is shown in Appendix A, Figures 3 through 13. Schematics of the camera station installations are

provided in Appendix C, Figures C2 through C5. The Crossings were covered with one photo station spanning the bottom of the crossing on each end. Passive photo stations were used at all of the culvert crossings and mounted to either the ceiling or high up on the side-walls of the culverts to help deter vandalism. The passive photo stations consisted of a sensing unit that sensed heat and movement in a detection area in the shape of a fan. The sensing unit was placed so it could detect anything that crossed in the vertical plane of detection. The camera was also mounted near the ceiling and connected to the sensing unit with a cord. With the exception of Sand Canyon (south side only), the passive photo stations were placed on both sides of the crossings.

Active photo stations consisted of an infrared sensing unit (transmitter and receiver) and a camera with a cord connected to the sensing unit. Since the spans of the Crossings are so extensive, a laser was used to aid in aligning the invisible infrared beam on the transmitter units. The camera was triggered when the infrared light beam was broken. Both pieces of the sensing unit and the camera were mounted to a 3-foot metal curb stakes, which were positioned to detect movement entering and exiting each Crossing. Both pieces of the sensing unit were adjusted to a height of approximately 18 inches to target medium to large mammals (e.g., raccoons, bobcats, deer, and mountain lions). The camera was positioned behind and up-slope of the receiver unit, so that both units were in the frame of the camera viewfinder and offset so that the flash did not overexpose the receiver unit in the foreground, diminishing the clarity of the background. Excess cord connecting the receiving unit and the camera was securely fastened to the stakes to prevent disturbance by animals or wind.

The video cameras were set up at Rocky Peak Road and Canoga Street using the passive sensor. The passive sensors were placed on their sides to detect any activity that crossed the vertical plane. The passive sensors at Canoga Street were augmented with an active sensor to help extend the range of sensitivity. The video cameras were chained to structures to help deter theft and vandalism.

Each photo station was checked each day during the study to ensure that it was functioning properly and that enough film remained to record any activity during the following 24-hour period.

General Track and Scat Surveys

General surveys for tracks and scat were conducted throughout the study area each day as the scent stations and photo stations were checked. These surveys consisted of a biologist meandering throughout the study area, locating game trails, and observing sign (e.g., tracks and scat). The surveyor was also on the alert for direct observations of wildlife. Since the study area is so extensive and much of the substrate is hard, the tracks were not cleared each day.

Determining Wildlife Usage of Crossings

The use of the Crossings, meaning traversing the entire SR-118 right-of-way, either by using a culvert, underpass, or overcrossing, will be determined by the presence of tracks at either both ends of a culvert that indicate travel in the same direction; the animal's image captured in the north and south photographs of a pair of camera stations installed at a Crossing; or tracks well within the center of the Crossing. An animal is determined to only be using the adjacent habitat or vegetative cover along SR-118 when the animal is detected at the scent stations or in the vicinity of a scent station, and there is no additional sign indicating that the animal approached, entered, or used the Crossing.

RESULTS

The results of the scent station, and photo station surveys are summarized in Appendix B, Tables D and E, respectively. Wildlife and sign that were observed away from the scent stations, but within the vicinity of the study area, are shown in Appendix B, Table F.

DISCUSSION

Data from the scent stations, photo stations, and general wildlife observations show that there is a variety of animals in the vicinity of each of the 13 Crossings including mountain lion, mule deer, coyote, raccoon, skunk, opossum, and ground squirrel.

Scent stations attracted a variety of animals, including medium to large mammals. Target study species recorded at the scent stations included mountain lion, coyote, bobcat, skunk and opossum (samples shown in Appendix A, Figures 14, 15, and 16). Bobcat tracks were observed at scent stations located at Collins Drive South, Alamos Canyon North, Alamos Canyon South, Hummingbird Creek and Rocky Peak Road North. A bobcat was seen at Collins Drive south of SR 118 in the scrub along the railroad tracks. Coyote tracks were observed at scent station locations at Collins North, Alamos Canyon South, Rocky Peak Road South and Browns Canyon Creek North. A coyote was observed in the ravine south of Rocky Peak Road. Mountain lion tracks were observed at the Alamos Canyon North-East scent station and at the White Oak Park Open Space scent station.

Animals that used the crossings were deer at Alamos Canyon Road Underpass. Raccoons, opossums, and rodents used Alamos Canyon East Culvert. Coyotes, domestic dogs, opossums, raccoons, and rodents used Browns Canyon Creek to move under SR 118 as evident by tracks. A raccoon was observed in Santa Susana Arch. Although mountain lion tracks were seen near two Crossings, Alamos Canyon North and White Oak Park, there was no evidence that they used the crossing structures to traverse under SR-118. Rain occurred on May 7 from 13:20 to 14:30. The scent stations at locations with plant cover were interpretable. The only scent stations obscured by the rain on that day were the Sand Canyon sites.

The photo stations recorded skunk and raccoon (samples shown in Appendix A, Figures 17 and 18). The video photo stations primarily recorded human activities such as cars, hikers, horseback riders, and mountain bikers; however, a couple of ground squirrels and birds were also recorded (samples shown in Appendix A, Figures 19 and 20).

Several indigent camps were present at Alamos Canyon South. Recreational use was high at Rocky Peak Road, Canoga Street, Brown Canyon, Sand Canyon, and White Oak Park. Hummingbird Canyon, north of SR-118 and east of White Oak Park, is currently being developed for single- and multi-family housing. The land north of SR-118 and west of Las Llajas Canyon is graded for future development.

There was a number of problems encountered with the photo stations and scent stations during the study. The passive sensors and cameras were stolen from the Sand Canyon Wash and Las Llajas Wash crossings during the first night of the study. Consequently, photo stations at these locations will be omitted from the entire study due to the lack of security. In addition, California Highway Patrol (CHP) officers confiscated the video cameras and sensors at the Rocky Peak Road overcrossing on May 7, 2003. Approximately one day's worth of data at Rocky Peak Road was missed between the removal and replacement of the cameras. Also, someone changed all of the sensor settings at Canoga Street, consequently data was not collected the previous night.

For future surveys, all of the photo stations will be better labeled with contact information and local CHP offices and officers will be notified of the equipment installation. A couple of the bait bags at the scent stations were torn open and the bait was eaten. In the future, the bait bags will be better reinforced to prevent animals from eating the bait.

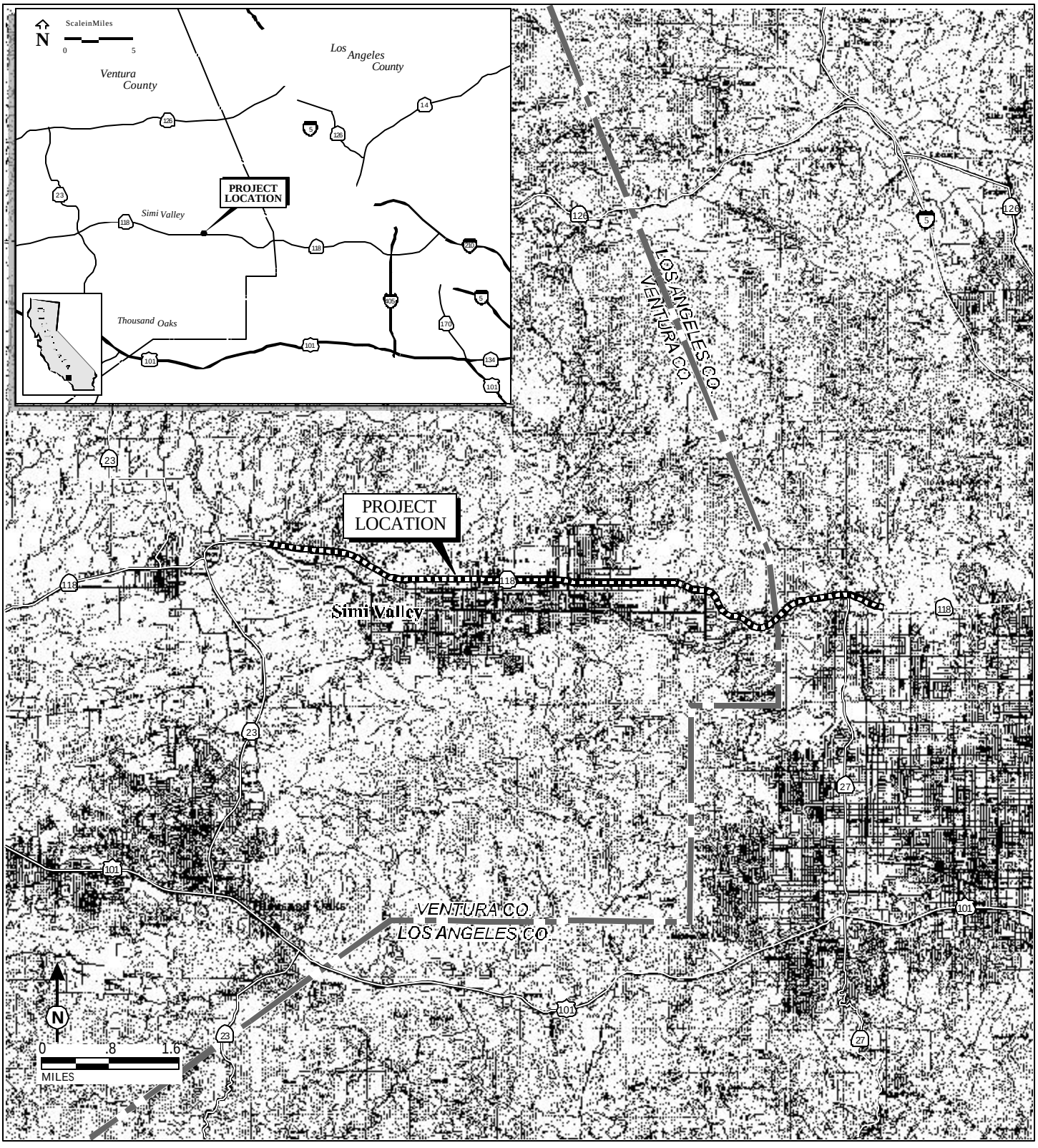
CONCLUSION

Overall, the first quarter survey data suggest that some of the Crossings are being used by a variety of small mammals, including raccoons, skunks, opossums, squirrels, and mice. Although several medium to large animals were near the crossings as detected by the scent stations, field observations determined that wildlife did not use all of the Crossings. Wildlife did use the Crossings at Alamos Canyon, Browns Canyon Creek, and Santa Susana Arch. Deer used Alamos Canyon Road Underpass; raccoons, opossums, and rodents used Alamos Canyon East culvert; coyotes, domestic dogs, opossums, raccoons, and rodents used Browns Canyon Creek; and a raccoon was observed in Santa Susana Arch. Since existing roads and trails allow access to a number of the Crossings, frequent human activity (e.g., indigents, vandals, hikers, bikers, horseback riders, and accompanying dogs) may be a factor in the amount of wildlife usage. Other factors may be the time of year and adjacent construction activities.

More surveys will be required in order to determine if the target study species are utilizing the existing Crossings as access to the Santa Susana Mountains and Simi Hills. Future surveys should provide a more complete picture of wildlife use at the Crossings within the Ventura State Highway 118 Corridor study area.

APPENDIX A

FIGURES



LSA

Figure1

PROJECTLOCATION

Ventura118WildlifeStudy

SOURCE:USGS30'x60'QUAD,LOSANGELES,CA.1979.

RegionalandLocationMap

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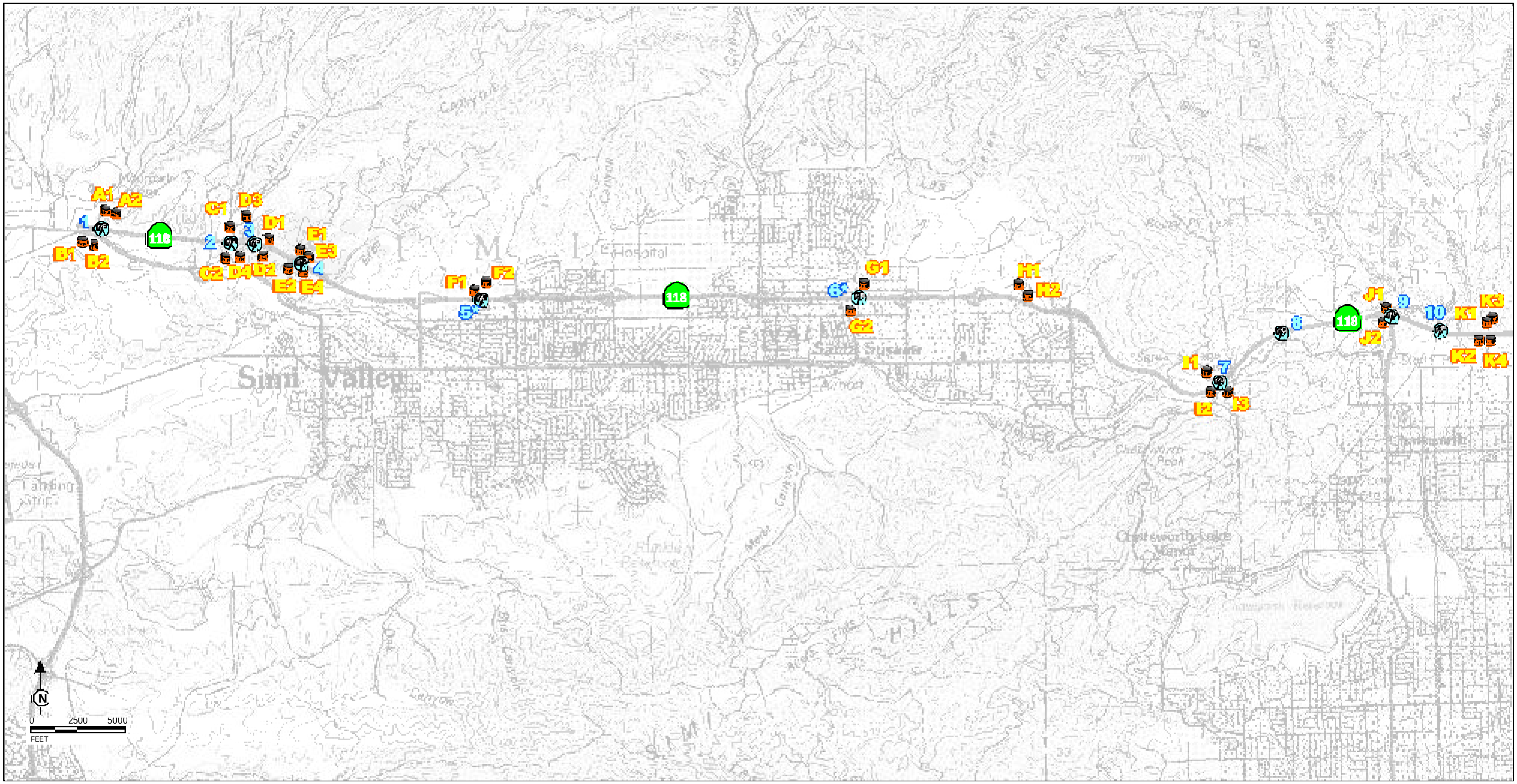

LSA

Figure2

CAMERA STATIONS

1. CollinsDriveBoxCulverts
2. AlamosCanyonWestRCPCulverts
3. AlamosCanyonUnderpass
4. SimiValleyLandfillCMPCulvert
5. SandCanyonBoxCulverts*
6. LasLlajasUnderpass*
7. RockyPeakRoadOvercrossing
8. SantaSusanaArch
9. MovieLaneOvercrossing
10. CanogaStreetUnderpass

*Vandalized on first night, therefore eliminated from study.

SCENT STATIONS

A1.CollinsDriveNorth-Channel
A2.CollinsDriveNorth-UtilityAccessRoad
B1.CollinsDriveSouth-WestofCreek
B2.CollinsDriveSouth-EastofDirtRoad
C1.AlamosCanyonNorth-WestCanyon
C2.AlamosCanyonSouth-WestCanyon
D1.AlamosCanyonNorth-EastCanyon
D2.AlamosCanyonSouth-EastCanyon
D3.AlamosCanyonNorth-AlamosCanyonRoad
D4.AlamosCanyonSouth-AlamosCanyonRoad
E1.SimiValleyLandfillNorth-CanyonBench
E2.SimiValleyLandfillSouth-InR.O.W.
E3.SimiValleyLandfillNorth-AtSpillway
E4.SimiValleyLandfillSouth-CreekBank
F1.SandCanyonWashNorth-NearCulvert
F2.SandCanyonWashNorth-UpstreamofCulvert
G1.LasLlajasCanyonNorth
G2.LasLlajasCanyonSouth
H1.WhiteOakParkOpenSpace
H2.HummingbirdCreek
I1.RockyPeakRoadNorth-R.O.W.
I2.RockyPeakRoadSouth-RavineinR.O.W.
I3.RockyPeakRoadSouth-Trail
J1.MovieLaneNorth
J2.MovieLaneSouth
K1.BrownsCreekNorth-TopofDike
K2.BrownsCreekSouth-WestofCreek
K3.BrownsCreekNorth-BottomofDike
K4.BrownsCreekSouth-EastofCreek

SOURCE:USGS30'x60'QUAD-LOSANGELES,CA.,1983.

Ventura118WildlifeStudy

CameraandScentStations

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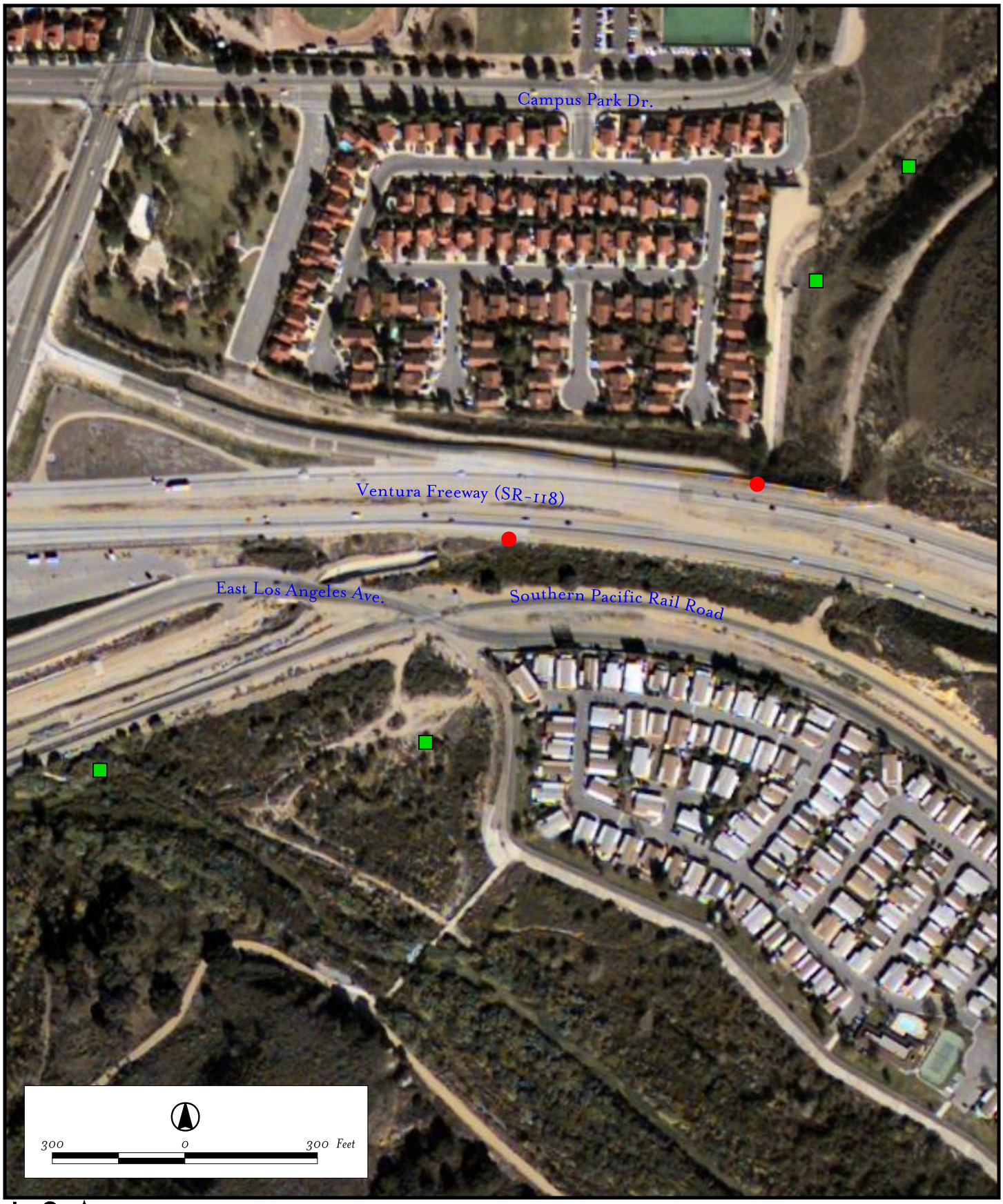

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Figure 3

Ventura 118 Wildlife Study

Collins Drive Box Culvert

Scent Station Locations

Photo Station Locations

Source: Photos - Eagle Aerial 2000

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LSA

Figure 4

Ventura 118 Wildlife Study

Alamos Canyon West RC Culvert; Alamos Canyon Underpass; Alamos Canyon East Pipe Culvert

Scent Station Locations

Photo Station Locations

Source: Photos - Eagle Aerial 2000

5/15/03 (I:\CDT2301\gis\cdt2301-wildlife-study.apr)

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Figure 5

Ventura 118 Wildlife Study

Scent Station Locations

Photo Station Locations

Simi Valley Landfill Pipe Culvert

Source: Photos - Eagle Aerial 2000

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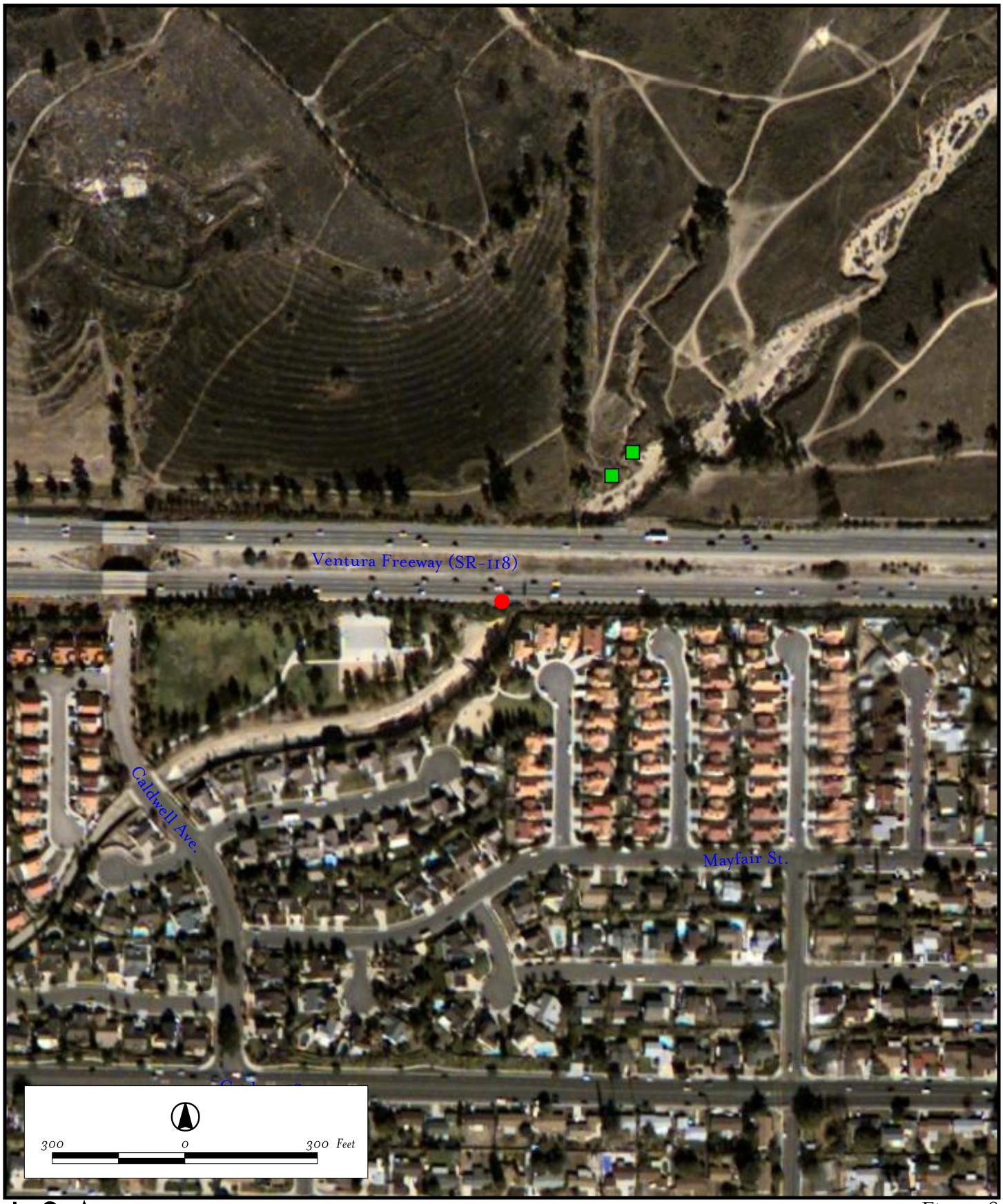

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Figure 6

Ventura 118 Wildlife Study

Sand Canyon

Scent Station Locations

Photo Station Locations

Source: Photos – Eagle Aerial 2000

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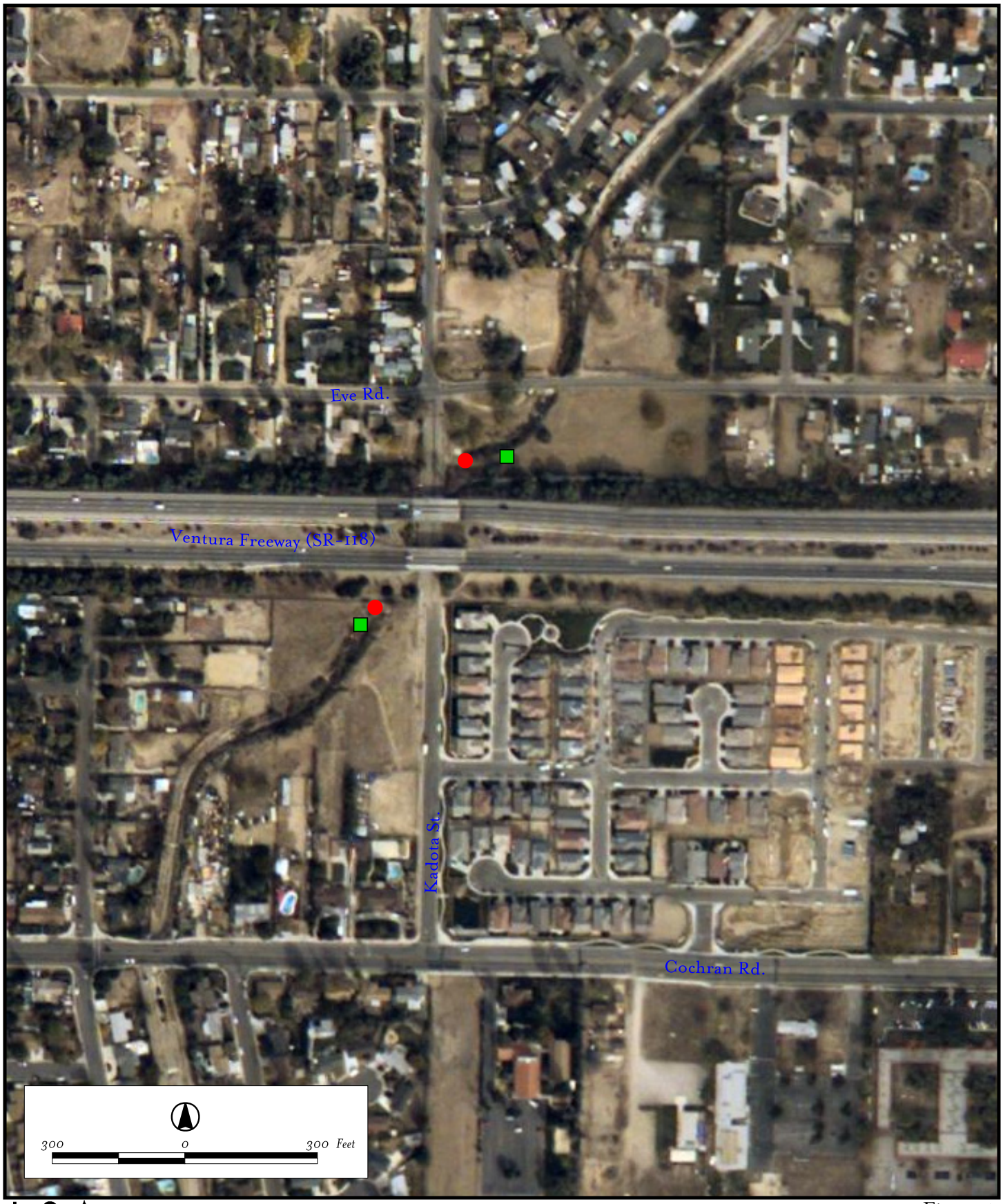

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Figure 7

Ventura 118 Wildlife Study

Las Llajas Underpass

Scent Station Locations

Photo Station Locations

Source: Photos – Eagle Aerial 2000

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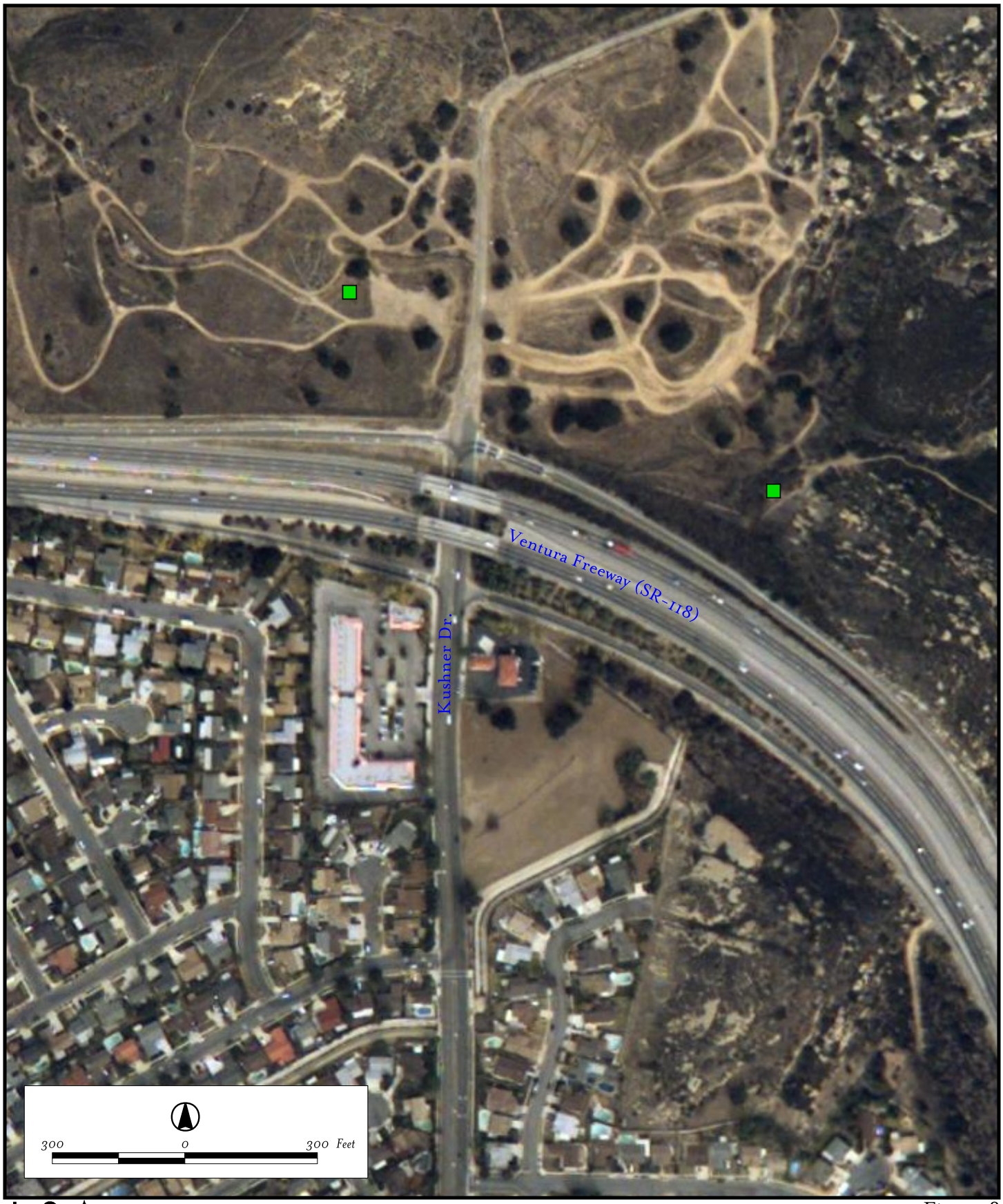

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Figure 8

Ventura 118 Wildlife Study

Scent Station Locations

White Oak Park

Source: Photos – Eagle Aerial 2000

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Figure 9

Ventura 118 Wildlife Study

Rocky Peak Overcrossing

Scent Station Locations

Photo Station Locations

Source: Photos – Eagle Aerial 2000

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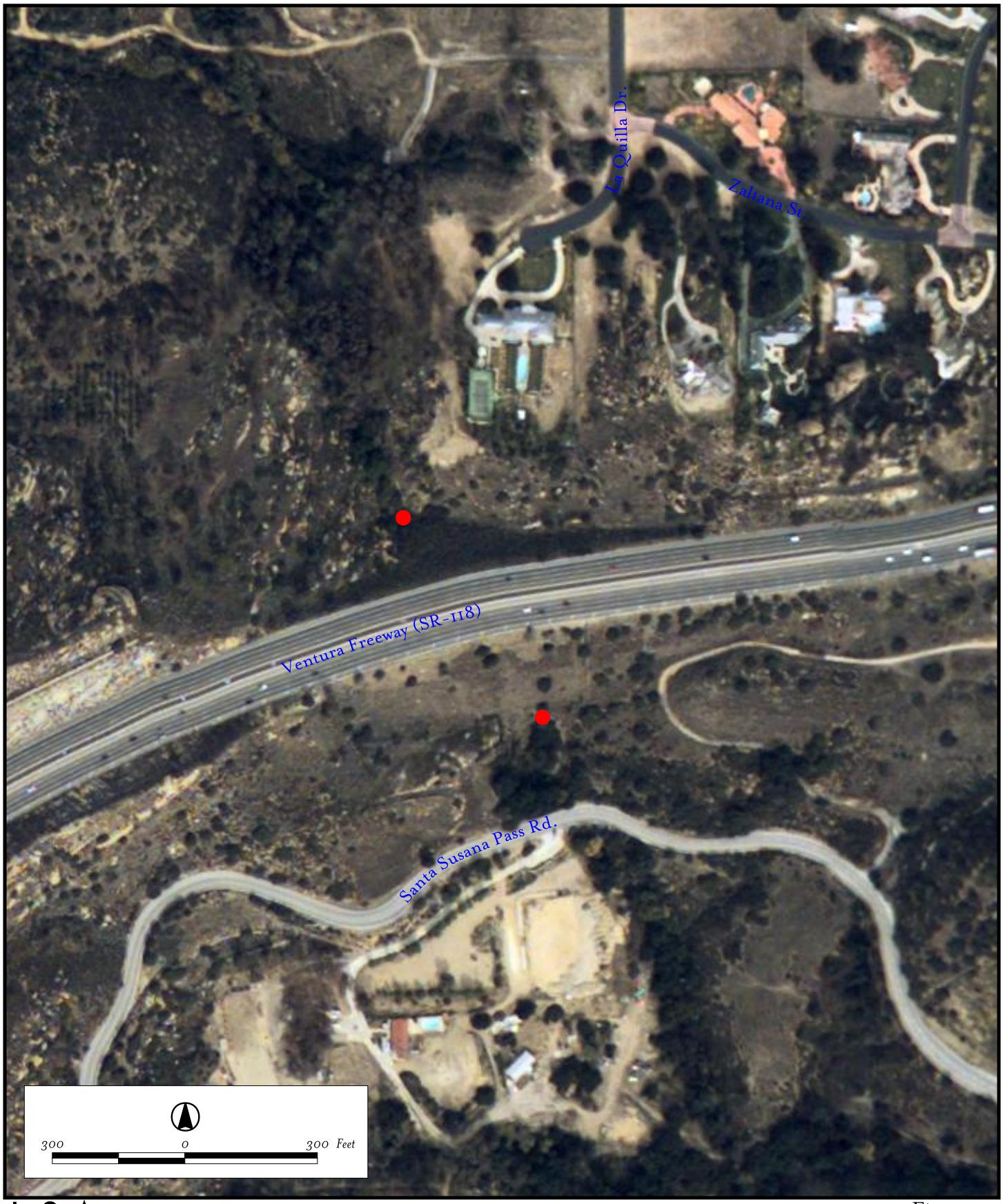

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Figure 10

Ventura 118 Wildlife Study

Photo Station Locations

Santa Susana Arch

Source: Photos - Eagle Aerial 2000

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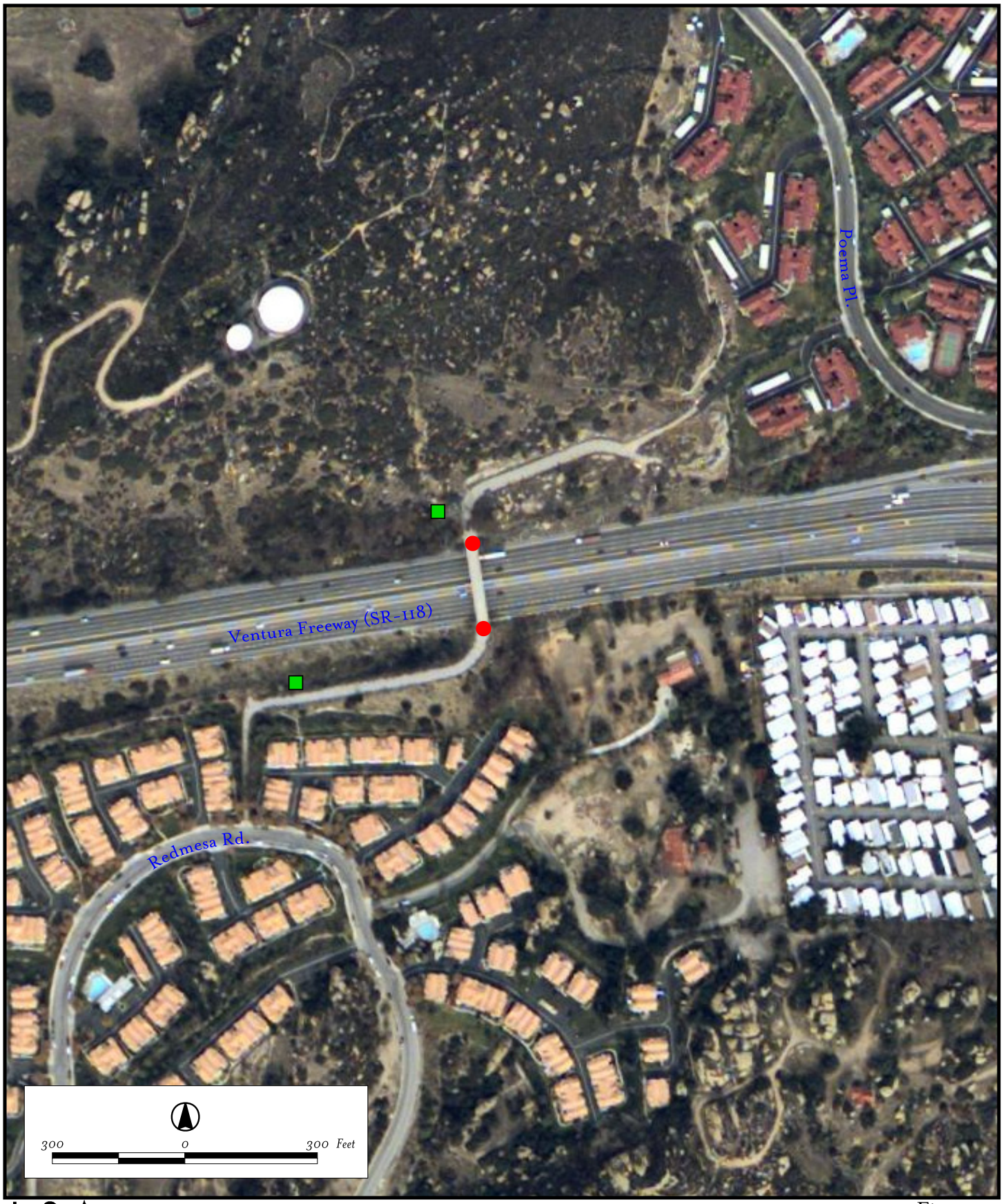

LSA

Figure 11

Ventura 118 Wildlife Study

Movie Lane Overcrossing

Scent Station Locations

Photo Station Locations

Source: Photos – Eagle Aerial 2000

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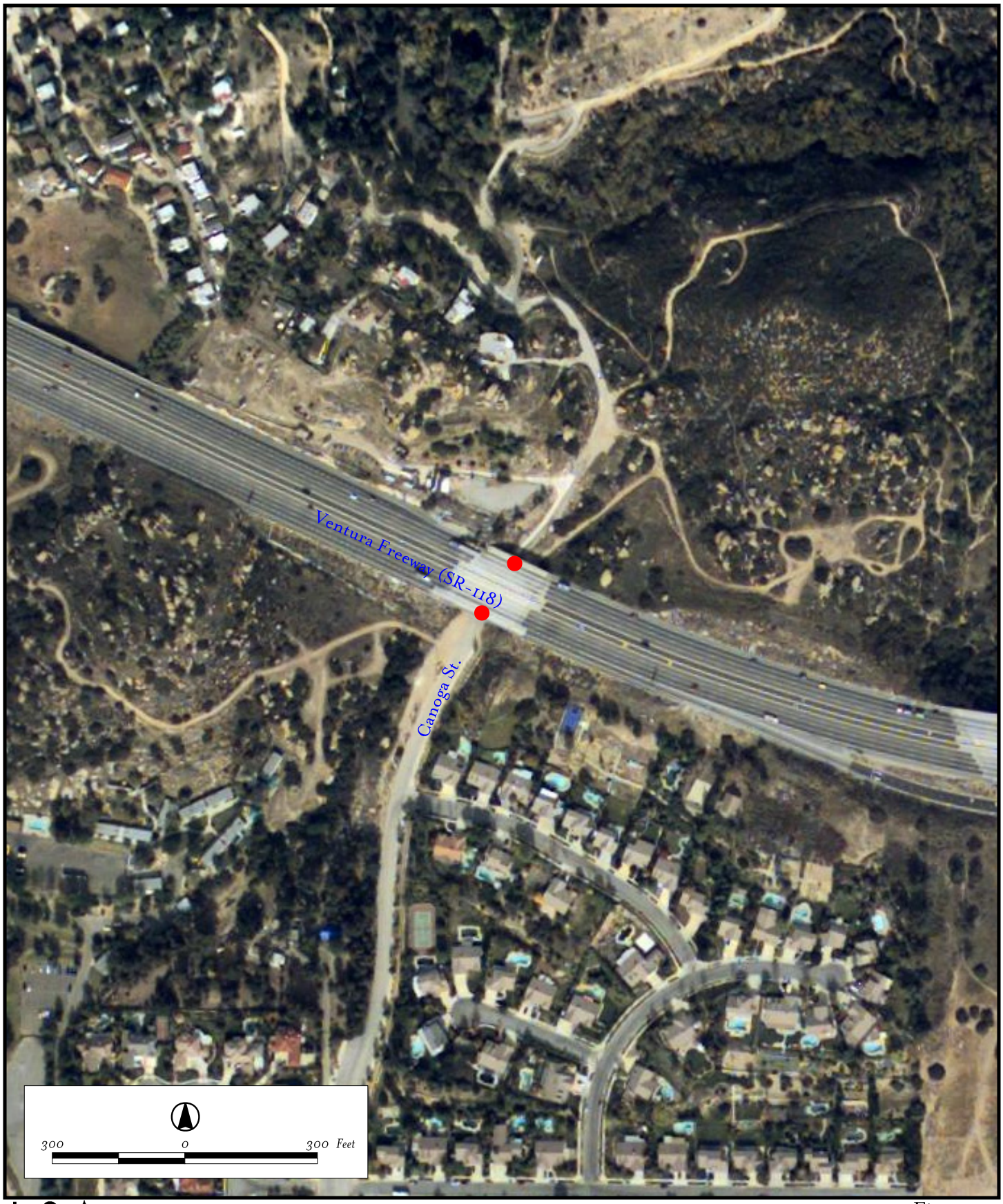

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Figure 12

Ventura 118 Wildlife Study

Photo Station Locations

Canoga Street Underpass

Source: Photos - Eagle Aerial 2000

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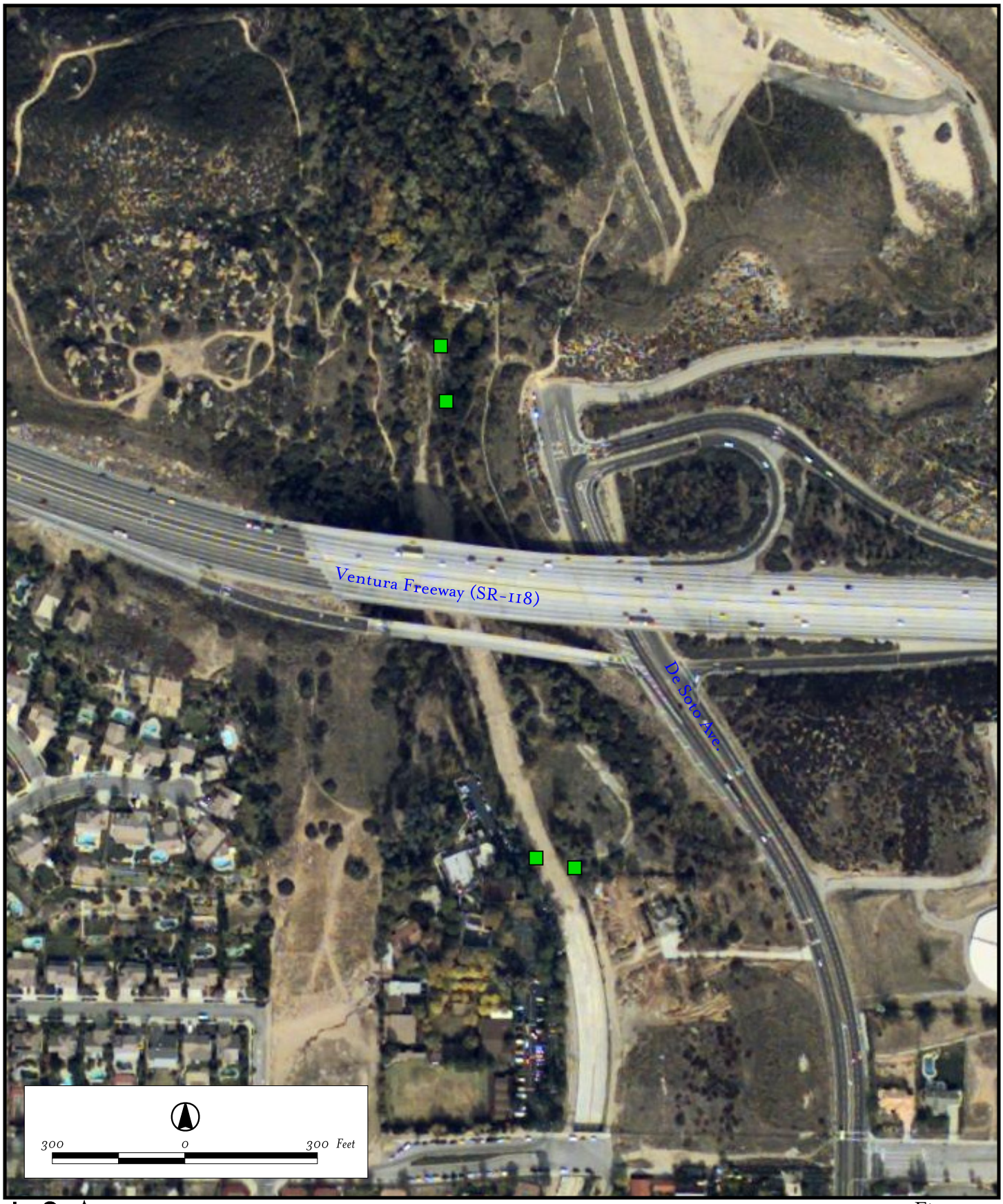

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Figure 13

Ventura 118 Wildlife Study

Scent Station Locations

Browns Creek

Source: Photos - Eagle Aerial 2000

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BobcattrackatEastAlamosNorthscentstation.

CoyotetrackatBrownsCreek.

LSA

Figure14

Ventura118WildlifeStudy
Track Photographs

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DeertracksatAlamosCanyoncrossing.

OppossumtrackatEastAlamosCMP.

LSA

Figure15

Ventura118WildlifeStudy
Track Photographs

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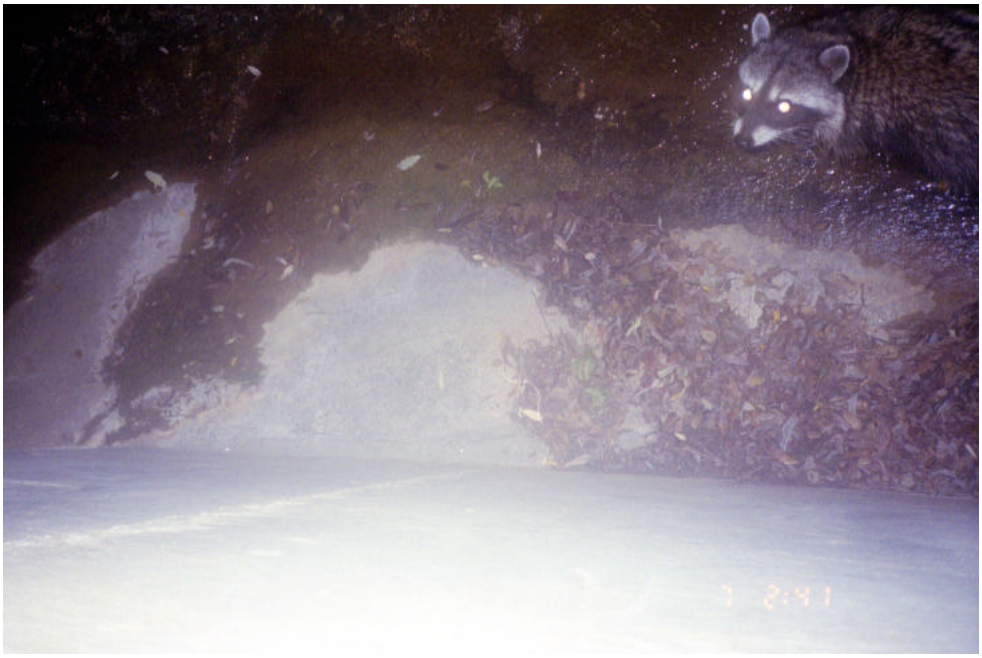
A skunk at the passive sensor in the northend of the Collins underpass on 5/7/03.

A coyote at the southern end of the Alamos Canyon underpass.

LSA

Figure 16

Ventura 118 Wildlife Study
Camera Station Photographs



Aracooniscapturedonfilminthenorthernsectionofthe SantaSusanaPassculvert.

Camouflaged amongstthedebrisandvegetation,arat (Rattussp.)attheSantaSusanaPass culvert.

LSA

Figure17

Ventura118WildlifeStudy
Camera Station Photographs

The active/passive sensor setup catches a Beechey Ground Squirrel on video at the Canoga undercrossing.

The Canoga undercrossing experiences both pedestrian and vehicular traffic.

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Figure 18

Ventura 118 Wildlife Study
Video Station Photographs

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ThevideosetupattheRockyPeakoverpasscapturesapairofhorsesandtheirriders.

VehiculartrafficdominatesthedatacollectedviathevideosetupatRockyPeakoverpass.

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Figure19

Ventura118WildlifeStudy
VideoStationPhotographs

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APPENDIX B

TABLES

Table A. Dimensions of Study Crossings

Wildlife Study Crossing	Approximate Dimensions (feet)
Collins Drive RC Box Culverts	**L:** 750, **W:** 12, **H:** 8
Alamos Canyon West Double RCP Culverts	**L:** 816, **D:** 10
Alamos Canyon Road Underpass	**L:** 147, **W:** 126, **H:** 15
Alamos Canyon East CMP Culvert	**L:** 600 , **D:** 6
Simi Valley Landfill CMP Culvert	**L:** 588, **D:** 6
Las Llajas Canyon Double RC Box Culvert	**L:** 190, **W:** 12, **H:** 8
Rocky Peak Road Overcrossing	**L:** 130, **W:** 60,
Santa Susanna Arch	**L:** 130, **W:** 5, **H:** 6
Movie Lane Overcrossing	**L:** 130, **W:** 60,
Canoga Street Underpass	**L:** 132, **W:** 85 at base, 170 at top, **H:** 17
Browns Creek	**L:** 130, **W:** 400 , **H:** 100

Note: RC = Reinforced Concrete, RCP = Reinforced Concrete Pipe, CMP = Corrugated Metal Pipe, L = Length or Distance Perpendicular to SR-118, W = Width or Distance Parallel to SR-118, H = Height, D = Diameter

Table B. Habitat Types Associated with Wildlife Study Crossings

Wildlife Study Crossing	Vegetation Type	Dominant Plant Species
Collins Road - North of SR 118	California Sagebrush-California buckwheat Series	California buckwheat, sagebrush, chamise, sugar bush, chaparral yucca
Collins South - South of SR 118	Mulefat Series and Mixed Willow Series	Mulefat and Non-native grasses; Fremont cottonwood, mulefat, mugwort, willow
Alamos Canyon - North of SR 118	California Sagebrush-California buckwheat Series, Coast Live Oak Series, Mixed Willow Series	Coyote brush, California buckwheat, Chaparral yucca, California sagebrush, cottonwood, willow, rushes
Alamos Canyon - South of SR 118	California Sagebrush-California buckwheat Series and Coast Live Oak Series	Coyote brush, California buckwheat, Chaparral yucca, California sagebrush, Coast Live oak, mulefat, elderberry, sugar bush
Simi Valley Landfill - North of SR 118	California Sagebrush-California buckwheat Series and Coast Live Oak Series	Coyote brush, California buckwheat, Chaparral yucca, California sagebrush, Coast Live Oak, mulefat, elderberry, sugar bush
Simi Valley Landfill - South of SR 118	California Sagebrush-California buckwheat Series and Coast Live Oak Series	Coyote brush, California buckwheat, Chaparral yucca, California sagebrush, Coast Live Oak, mulefat, elderberry, sugar bush
Sand Canyon - North of SR 118	Disturbed	Non-native grasses, Eucalyptus trees, Sand excavation
Sand Canyon - South of SR 118	Residential - Tract Housing	Community park and Maintained flood control channel
Las Llajas - North of SR 118	Residential - Moderate Density Horse Properties	Non-native grasses, Mulefat, Eucalyptus trees
Las Llajas - South of SR 118	Residential - Moderate Density Horse Properties	Non-native grasses, Mulefat, Eucalyptus trees
White Oak Park Open Space	Annual Grassland	Non-native grasses and scattered Coast Live Oak trees
Hummingbird Creek	Coast Live Oak Series and Mixed Willow Series	
Rocky Peak Road - North of SR 118	California Sagebrush-California buckwheat Series	California buckwheat, sagebrush, chamise, sugar bush, chaparral yucca
Rocky Peak Road - South of SR 118	California Sagebrush-California buckwheat Series	California buckwheat, sagebrush, chamise, sugar bush, chaparral yucca
Santa Susana Arch	Coast Live Oak Series	Oak trees, poison oak
Movie Lane - North of SR 118	California Sagebrush-California buckwheat Series	California buckwheat, sagebrush, chamise, sugar bush, chaparral yucca
Movie Lane - South of SR 118	California Sagebrush-California buckwheat Series	California buckwheat, sagebrush, chamise, sugar bush, chaparral yucca
Browns Creek - North of SR 118	Eucalyptus series and Fremont Cottonwood series	Mostly eucalyptus trees on canyon slopes with cottonwoods north of the dike
Browns Creek - South of SR 118	Eucalyptus series and non-native grasses and forbs	Eucalyptus on canyon slopes and sweet clover and non-native grasses in creek

Reference: Sawyer and Keeler-Wolf, 1995. A Manual of California Vegetation.

Table C. List of Camera and Scent Stations for the Ventura State Route 118 Wildlife Corridor Study

Map Labels	Camera Station/Crossing Location	Cameras		Map Labels	Scent Stations
		North	South		
		West Bound	East Bound		
1	Collins Drive R.C. Box Culverts	1-Passive 35 mm	1-Passive 35-mm	A1	Collins Drive North-Channel
2	Alamos Canyon West RCP Culverts	2-Passive 35 mm	1-Passive 35-mm	A2	Collins Drive North-Utility Access Road
3	Alamos Canyon Road Underpass	1-Active 35 mm	1-Active 35-mm	B1	Collins Drive South-West of Creek
4	Simi Valley Landfill CMP Culvert	1-Passive 35 mm	1-Passive 35-mm	B2	Collins Drive South-East of Dirt Road
5	Sand Canyon R.C. Box Culvert	1-Passive 35 mm	None	C1	Alamos Canyon North- West Canyon
6	Las Llajas R.C. Box Culvert	1-Passive 35 mm	1-Passive 35-mm	C2	Alamos Canyon South-West Canyon
7	Rocky Peak Road Overcrossing	1-Passive video	1-Passive video	D1	Alamos Canyon North -East Canyon
8	Santa Susana Arch	1-Passive 35 mm	1-Passive 35-mm	D2	Alamos Canyon South-East Canyon
9	Movie Lane Overcrossing	1-Active 35 mm	1-Active 35-mm	D3	Alamos Canyon North-Alamos Canyon Road
10	Canoga Street Underpass	1-Active - 35mm 1-Passive video	1-Active 35-mm 1-Passive video	D4	Alamos Canyon South-Alamos Canyon Road
				E1	Simi Valley Landfill North-Canyon Bench
				E2	Simi Valley Landfill South-In ROW
				E3	Simi Valley Landfill North-At Spillway
				E4	Simi Valley Landfill South-Creek Bank
				F1	Sand Canyon Wash North- Near Culvert
				F2	Sand Canyon Wash North-Upstream of Culvert
				G1	Las Llajas Canyon North
				G2	Las Llajas Canyon South
				H1	White Oak Park Open Space
				H2	Hummingbird Creek
				I1	Rocky Peak Road North-R.O.W.
				I2	Rocky Peak Road South-Ravine in R.O.W.
				I3	Rocky Peak Road South-Trail
				J1	Movie Lane –North
				J2	Movie Lane-South
				K1	Browns Creek North of SR118 – Top of Dike
				K2	Browns Creek South of SR118 – West of Creek
				K3	Browns Creek North of SR118 – Bottom of Dike
				K4	Browns Creek South of SR118 – East of Creek

Table D. Ventura 118 Wildlife Corridor Study Scent Station Observations, May 6-10, 2003

	Domestic Cat	Bobcat	Canid species	Domestic Dog	Coyote	Mountain Lion	Skunk	Opossum	Raccoon	Ground Squirrel	Rat and other Small Rodents	Rabbit	Bird Species	Lizard
Collins North of SR 118 at Creek Channel	1		2							5	6		1	
Collins North of SR 118 at Utility Access Road					1		3			3	3			
Collins South of SR 118 - West at Arroyo Simi Creek Bank		2								2	3			
Collins South of SR 118 - East in Arroyo Simi Flood Plain											3	1		
Alamos Canyon North of SR 118 - West Canyon		1												
Alamos Canyon South of SR 118 - West Canyon														
Alamos Canyon North of SR 118 - Alamos Canyon Road							2	1		1	6			
Alamos Canyon South of SR 118 - Alamos Canyon Road		1			2			1			3			
Alamos Canyon North of SR 118 - East Canyon		2				1		1	1					
Alamos Canyon South of SR 118 - East Canyon											2		1	
Simi Valley Landfill North of SR 118 - Spillway											1		2	
Simi Valley Landfill North of SR 118- Canyon Bench														1
Simi Valley Landfill South of SR 118- Caltrans R.O.W.														1
Simi Valley Landfill south of SR 118- Creek bank										1				
Sand Canyon North of SR 118 - Downstream Site			4								2			1
Sand Canyon North of SR 118 - Upstream Site			3								2			
Las Llajas North of SR 118							2	3						1
Las Llajas South of SR 118	2						3	2		1	1		1	3
White Oak Park Open Space North of SR 118						1				4	1			
Hummingbird Creek North of SR 118		3									1			
Rocky Peak Road North of SR 118 - Right-of-Way		1						2			1			1
Rocky Peak Road South of SR 118 -Ravine in Caltrans R.O.W.					1									
Rocky Peak Road South of SR 118 - Hiking Trail											1			
Movie Lane North of SR 118								1			1			
Movie Lane South of SR 118											1			
Browns Creek North of SR 118 - Top of Dike					1		2			2	2			
Browns Creek North of SR 118 - Bottom of Dike							2			2	3			
Browns Creek South of SR 118 - West of Creek														
Browns Creek South of SR 118 - East of Creek											1			

Table E. Photo Station Data- Spring 2003
Ventura State Highway 118 Corridor Wildlife Monitoring

Spring 2003				
Collins Culvert				
Date	**Time**	**North End**	**South End**	
05/05/03	8:06	Skunk		
05/07/03	5:31	Skunk		
05/08/03	UNK	Skunk		
Movie Lane Overpass				
NO WILDLIFE EVENTS				
Simi Valley Landfill Culvert				
NO WILDLIFE EVENTS				
Alamos Canyon Undercrossing				
05/10/03	UNKNOWN		Coyote	
Alamos Canyon Culvert				
NO WILDLIFE EVENTS				
Santa Susana Culvert				
05/06/03	4:38	Rat		
05/07/03	2:41	Raccoon		
05/08/03	10:06	Unknown Eyeshine		
Canoga Undercrossing				
Date	**Time**	**Camera Time**	**East End**	**West End**
05/06/03	7:55	11:25:14	Bird	
05/06/03	8:17	12:07:13	Bird	
05/06/03	9:04	12:49:21	Bird	
05/06/03	9:42	13:27:25	Bird	
05/07/03	12:15	0:16:01	Bird	
05/07/03	12:39	1:07:21	Bird	
05/07/03	17:42	7:50:14	Bird	
05/08/03	11:44	1:21:12	Bird	
05/08/03	11:58	1:57:11	Bird	
05/08/03	12:21	2:34:15	Bird	
05/08/03	12:25	2:39:28	Bird	
05/08/03	12:32	2:55:02	Bird	
05/08/03	12:43	3:11:04	Bird	
05/09/03	12:04	19:16:19	Bird	
05/09/03	1:53	21:42:28	Squirrel	
05/10/03	9:53		Bird	
05/10/03	11:48	37:41:18	Squirrel	
05/08/03	13:24	16:41:05		Bird
05/09/03	7:00	26:21:27		Bird
05/09/03	12:05	33:32:14		Bird
05/09/03	13:50	35:33:18		Bird
Rocky Peak Overpass				
Date	**Time**	**Camera Time**	**East End**	**West End**
NO WILDLIFE EVENTS				

Table F. Ventura 118 Wildlife Corridor Study Additional Wildlife Observations, May 6-10, 2003

	Domestic Cat	Bobcat	Canid species	Domestic Dog	Coyote	Mountain Lion	Skunk	Opossum	Raccoon	Ground Squirrel	Rat and other Small Rodents	Rabbit	Bird Species	Lizard	Deer	Horse
Collins Road - North of SR 118								D/O								
Collins South - South of SR 118		D/O			S											
Alamos Canyon - North of SR 118		S, T			S		SC	D/O, T	T	T	D/O, T	S			T	
Alamos Canyon - South of SR 118								D/O, T			D/O, T	S				
Simi Valley Landfill - North of SR 118					T,S						T	T	T			
Simi Valley Landfill - South of SR 118										D/O						
Sand Canyon - North of SR 118 (Culvert)		T	T	T												
Sand Canyon - North of SR 118 (Upstream)																
Las Llajas - North of SR 118				T												
Las Llajas - South of SR 118				T												
White Oak Park Open Space				T						D/O						
Hummingbird Creek		T	T						T							
Rocky Peak Road - North of SR 118		T	T		T			T	T		T					
Rocky Peak Road - South of SR 118		T			DO							T,S				T
Santa Susana Arch																
Movie Lane - North of SR 118					S						S	S				
Movie Lane - South of SR 118					S											
Browns Creek - North of SR 118					S,T		T			T	T					
Browns Creek - South of SR 118	T	T	T	T	T		T	D/O, T	T				T			

D/O - Direct Observation, T - Track, S - Scat, SC - Scent

Note: RC = Reinforced Concrete, RCP = Reinforced Concrete Pipe, CMP = Corrugated Metal Pipe, L = Length or Distance Perpendicular to SR-118, W = Width or Distance Parallel to SR-118, H = Height, D = Diameter

APPENDIX C

SCENT STATION PHOTOGRAPHS AND CAMERA STATION SCHEMATICS

PHOTOGRAPH 1:
Amy Pettler, Caltrans, at Simi Valley Landfill–north scent station.

PHOTOGRAPH 2:
Maria Lum at North Alamos Canyon West Canyon scent station.

LSA

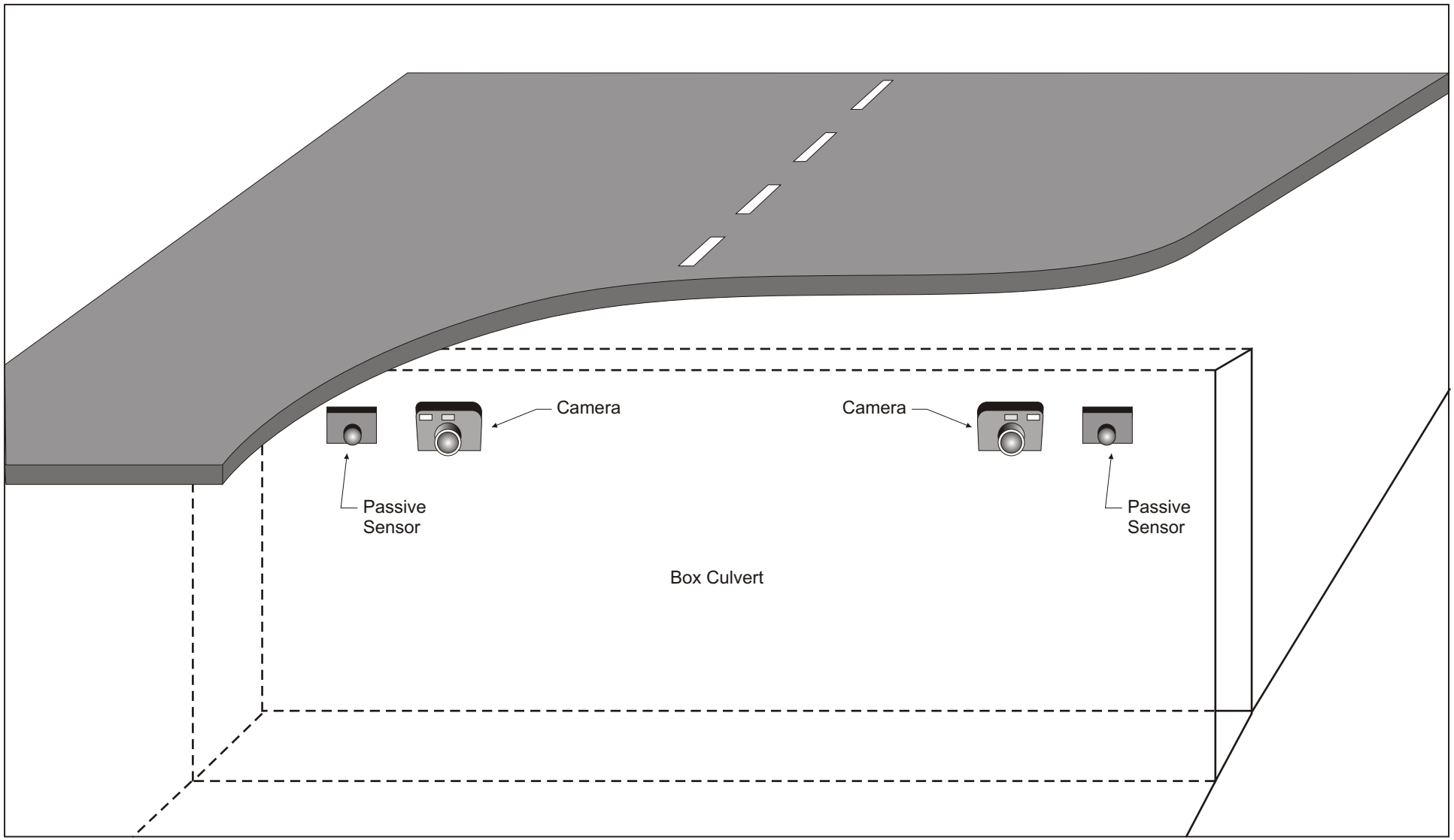
FIGURE C1

Ventura 118 Wildlife Study
First Quarter Survey
May 5th – 10th, 2003
Scent Station Photographs

LSA

FIGURE C2

Ventura 118 Wildlife Study
First Quarter Survey
May 5th – 10th, 2003
Video Camera Placement for
Overcrossings Bridge at Rocky Peak Road and Movie Lane

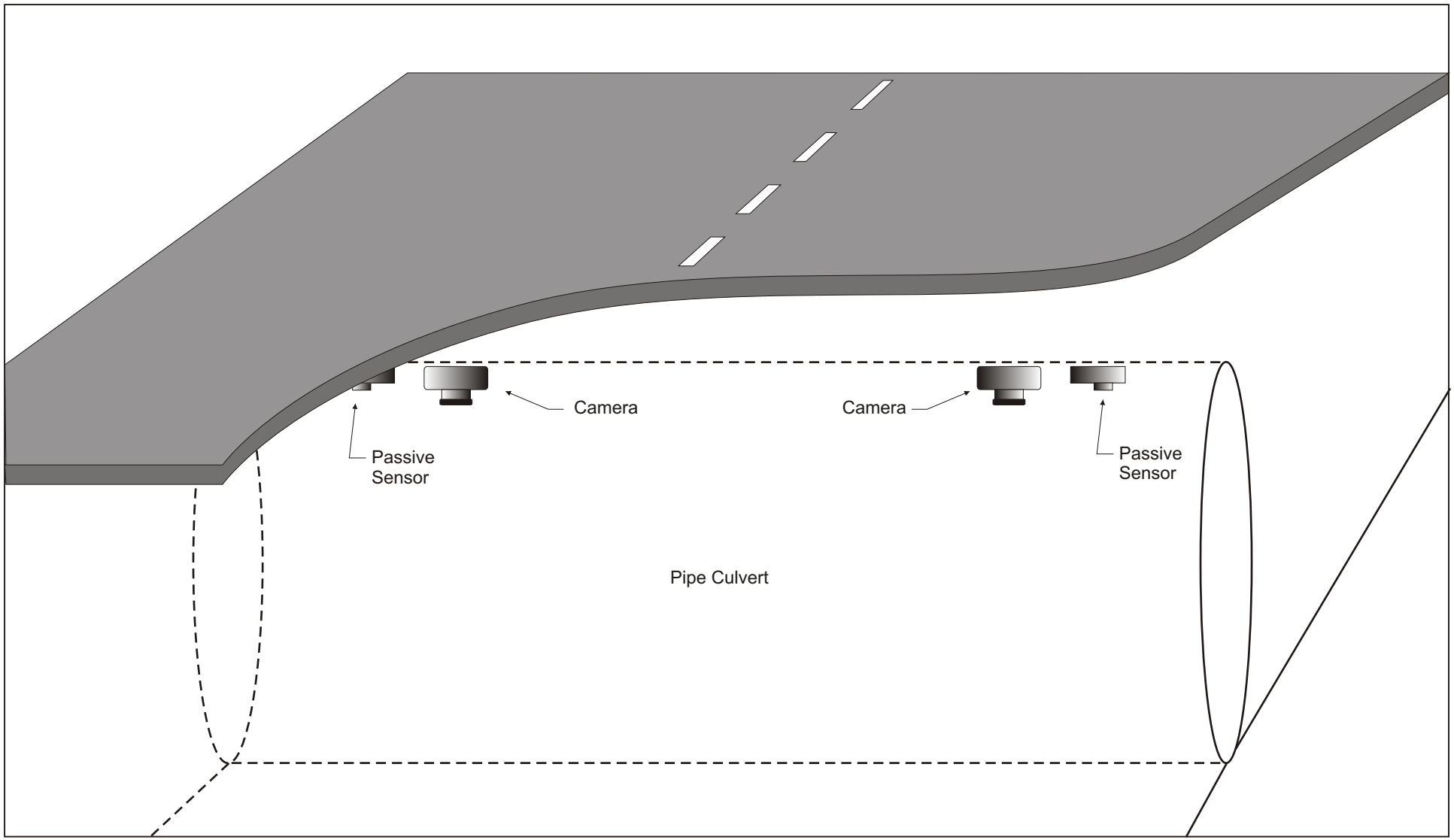


LSA

FIGURE C3

NOTE: Station is mounted on side walls.

Ventura 118 Wildlife Study
First Quarter Survey
May 5th – 10th, 2003
Passive Camera Station for Box Culverts
at Alamos Canyon and Collins Drive

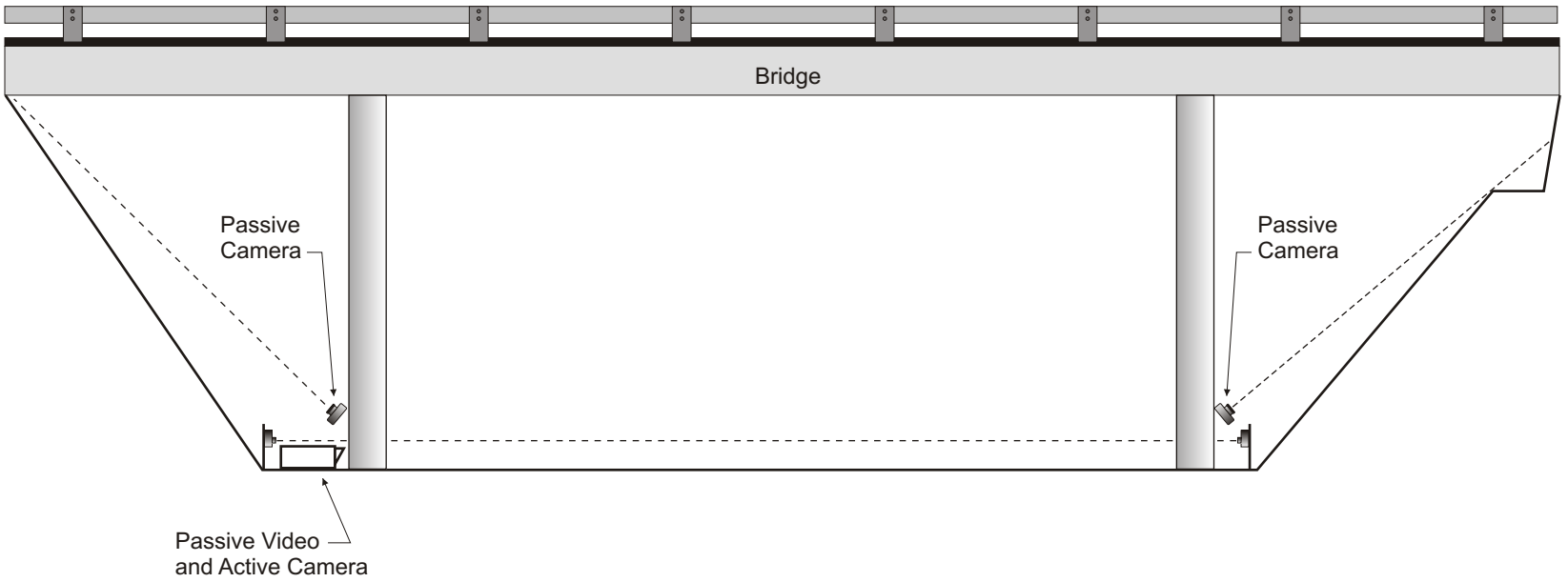


LSA

FIGURE C4

Ventura 118 Wildlife Study
First Quarter Survey
May 5th - 10th, 2003
Passive Camera Station for Pipe Culverts at
Simi Valley Landfill and Santa Susana Arch

R:\CDT230I\Graphics\Quarterly Report\1st QTR\Appendix C\C4_pipeculvert.cdr (6/3/03)



LSA

FIGURE C5

Ventura 118 Wildlife Study
First Quarter Survey
May 5th - 10th, 2003
Passive and Active SLR and Video Camera Station for Underpass
at Alamos Canyon Road, Canoga Street and Las Llajas Canyon